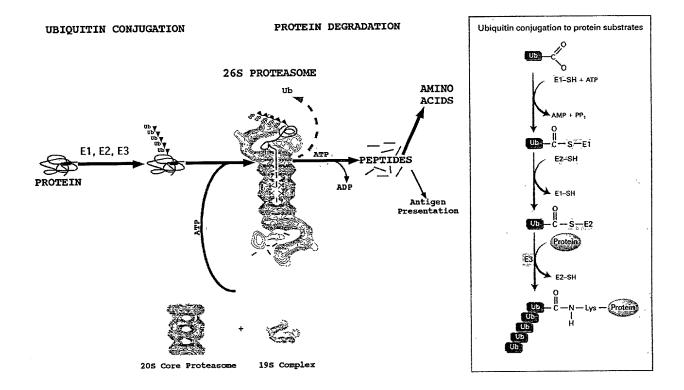
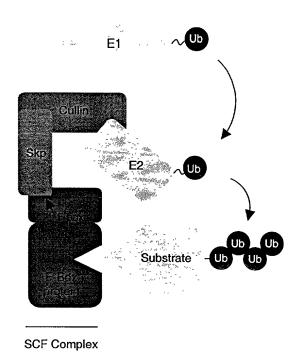
Figure 1.

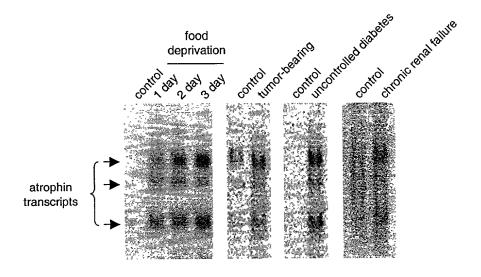


The ubiquitin-proteasome

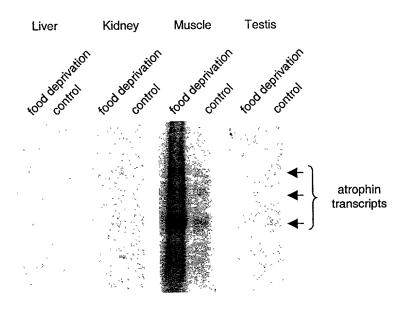
Figure 2.



SCF Ub-protein ligases



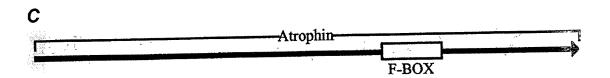
mRNA for atrophin-1 is increased in atrophying muscles due to many causes. Northern blot analysis of total RNA isolated from normal or atrophying rodent muscle and probed with a truncated human atrophin-1 cDNA.



mRNA for atrophin-1 is specifically expressed in muscle, where its expression is markedly increased by food deprivation. Northern blot analysis of total RNA isolated from normal or atrophying mouse muscle due to food deprivation, and probed with a full-length murine atrophin-1 cDNA.

CCCACGCGTCCGGCTAAGAGCAGGCGGCTCTTGGCGGCAACAAAGAGACGGGGCAGCGGCCCGGGATAAAT ACTGCGCTCGGGCAGCCGCTCAGCATTCCCAGAGTCAGGAGGCGACCTTCCCCAACGCCTGCGCCCCTGTG AGTGCAAGGATCCCCGCGCCCACCCAGGATCCGCAGCCCTCCACACTAGTTGACCCACTCTTGTCCCGGTC GCCGCCTGCGTCGTTCCCCAGCATCTTCCCAACGCGCCGCATACCCTGGGCAAGCCAGGCCGGTTCCTGGC GTCCCCGGGCCAGAGCTGGGTGAAGACGGCGGACGGCTGGAAGCGCTTCTTGGATGAGAAAAGCG GCAGCTTCGTGAGCGACCTCAGCAGTTACTGCAACAAGGAGGTATACAGTAAGGAGAATCTGTTC AACTCAGTACTTCCATCAAGAAAAGTGGATCTATGTTCACAAAGGAAGTACGAAGGAGCGCCATG GATACTGTACTTTGGGGGAAGCTTTCAACAGACTGGACTTCTCAACTGCCATTCTGGATTCCAGA AGATTTAACTACGTGGTCCGGCTGTTGGAGCTGATAGCAAAGTCACAGCTCACATCCCTGAGTGG CATCGCCCAAAAGAACTTCATGAATATTTTGGAAAAAGTGGTACTGAAAGTCCTTGAAGACCAGC AAAACATTAGACTAATAAGGGAACTACTCCAGACCCTCTACACATCCTTATGTACACTGGTCCAA AGAGTCGGCAAGTCTGTGCTGGTCGGGAACATTAACATGTGGGTGTATCGGATGGAGACGATTCT AGCCTGGGCCAGGCCCCAGACCTGCATGTGCTCAGTGAGGACCGGCTACTGTGGAAGAGACT TGGATTGGAAGAAGATGTATTTTAAGCTTGTACGATGTTACCCAAGAAGAGAGCAGTATGGGGTC ACCCTGCAGCTTTGCAAACACTGCCACATTCTCTCCTGGAAGGGCACTGACCATCCGTGCACGGC GAATAATCCCAGCACACGACAACACTTCAGAAGGCTTCTAATTGGATGGCTGGGAGTTCGGGACACTTCAT TTGTAAATAGTGTACATTTTAAGCATTGGCTTGAAACTGCGGGGGATACGTCATTGAGGAGACGTTGGCGG GGAAGAGATGCAGTTGCCGATGGAAATTTACAAATGTGAATTCCACATGAGAACTGGTACAGAAAAGCAGA CAGCCATGGAAACGGAGTCCTCTTGAGTTCCCTAGGAAGAAAAAGGCAAAAAAGCTCAAAAAACAAGATGGAA GAAACCCTTGGGCTTTGGGTTTGGATTCGGGGTTTGTTTTCAGCAGGCCAAGAAGTATATCCACCTGAAAT TCTGGCAACATACTTTATCTGGGAGGCAATGTCTGTGTTTCATGTAAGTTCTATACTCTGTGAAGTGATCT AAGATGGGAAGGCTGTTAGGAAAAAAAAAAAAAAAA

B
MPFLGQDWRSPGQSWVKTADGWKRFLDEKSGSFVSDLSSYCNKEVYSKENLFSSLDYDVAAKKRKKDIQNS
KTKTQYFHQEKWIYVHKGSTKERHGYCTLGEAFNRLDFSTAILDSRRFNYVVRLLELIAKSQLTSLSGIAQ
KNFMNILEKVVLKVLEDQQNIRLIRELLQTLYTSLCTLVQRVGKSVLVGNINMWVYRMETILHWQQQLNNI
QITRPAFKGLTFTDLPLCLQLNIMQRLSDGRDLVSLGQAAPDLHVLSEDRLLWKRLCQYHFSERQIRKRLI
LSDKGQLDWKKMYFKLVRCYPRREQYGVTLQLCKHCHILSWKGTDHPCTANNPESCSVSLSPQDFINLFKF



Isolation of the mouse atrophin-1 gene. A, nucleotide sequence of the mouse atrophin-1 gene. B, the deduced amino acid sequence of mouse atrophin-1 protein. The F-box motif is underlined. C, schematic representation of atrophin-1 protein. The box represents the F-Box motif.